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DOCKET NO. MS164183.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of

Applicant: **Dimitris Achlioptas**

Serial No.: **10/086,309**

Filed: **March 1, 2002**

For: **SYSTEM AND METHOD ADAPTED TO FACILITATE DIMENSIONAL TRANSFORM**

Art Unit: **2121**

Examiner: **Unknown**

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
U.S. Patent and Trademark Office
Washington, D.C. 20231

Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, publications and other information listed on the attached PTO-1449. A copy of each listed document is enclosed except for: (a) pending applications or (b) those previously cited or submitted to the Office in the following application(s) upon which this application relies for an earlier filing date under 35 U.S.C. 120:

Serial No.: _____

Filing Date: _____

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):

(a) _____ Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report.

(b) _____ Attachment entitled "Concise Explanation of Relevance of Non-English Language Documents".

3. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):

(a) _____ Within 3 months of the filing date or date of entry into the National Stage.

(b) X Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R.

(c) ____ After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance.

(1) ____ The required certification is given below, or

(2) ____ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement.

(d) ____ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below.

(1) ____ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(i)(1), or

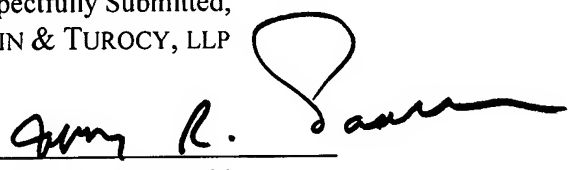
4. Certification (if applicable)

(a) ____ The undersigned hereby certifies that each item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.

(b) ____ The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the undersigned's knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of this Statement.

Respectfully Submitted,
AMIN & TUROCY, LLP

By

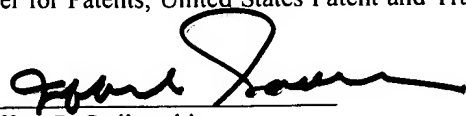

Jeffrey R. Sadlowski
Reg. No. 47,914

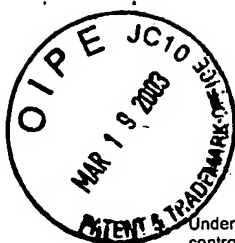
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Cleveland, Ohio 44114

CERTIFICATE OF MAILING

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Substitute for form 1449A/PTO		Information if Known	
		Application Number	10/086,309
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	March 1, 2002
		First Named Inventor	Dimitris Achlioptas
		Art Unit	2121
		Examiner Name	Unknown
		Attorney Docket Number	MS164183.1/MSFTP316US
Sheet	1	of	3

U.S. PATENT DOCUMENTS					
Examiner Initials ²	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US- 5,647,058	7-8-97	Agrawal, et al.	
		US- 6,032,146	2-29-00	Chadha, et al.	
		US- 6,122,628	9-19-00	Castelli, et al.	
		US- 6,134,541	10-17-00	Castelli, et al.	
		US- 6,134,555	10-17-00	Chadha, et al.	
		US- 6,505,207	1-7-03	Aggarwal, et al.	
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ - Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
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¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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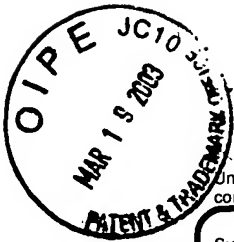
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Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/086,309
		Filing Date	March 1, 2002
		First Named Inventor	Dimitris Achlioptas
		Group Art Unit	2121
		Examiner Name	Unknown
		Attorney Docket Number	MS164183.1/MSFTP316US
Sheet 2	of 3		

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		WILLIAM B. JOHNSON, et al.; "Extensions of Lipschitz mappings into a Hilbert space", Contemporary Mathematics, 1984, Pages 189-206, Vol. 26	
		P. FRANKL, et al.; "The Johnson-Lindenstrauss Lemma and Sphericity of Some Graphs", Journal of Combinatorial Theory, 1988, Pages 355-362, Series B 44	
		SANJEEV ARORA, et al.; "Learning Mixtures of Arbitrary Gaussians", 2001, Pages 247-257	
		SANJOY DASGUPTA; "Learning Mixtures of Gaussians", 1999	
		SANJOY DASGUPTA, et al.; "An elementary proof of the Johnson-Lindenstrauss Lemma", March 1999, Pages 1-5	
		PIOTR INDYK; "Stable Distributions, Pseudorandom Generators, Embeddings and Data Stream Computation", 2000, Pages 1-9	
		PIOTR INDYK, et al.; "Approximate Nearest Neighbors: Towards Removing the Curse of Dimensionality", 1998, Pages 604-613	
		JON M. KLEINBERG; "Two Algorithms for Nearest-Neighbor Search in High Dimensions", 1997, Pages 599-608	
		NATHAN LINIAL, et al.; "The geometry of graphs and some of its algorithmic applications", 1995, Pages 1-26	
		CHRISTOS H. PAPADIMITRIOU, et al.; "Latent Semantic Indexing: A Probabilistic Analysis", November 14, 1997, Pages 1-15	
		LEONARD J. SCHULMAN; "Clustering for edge-Cost Minimization", 2000, Pages 1-31	

Examiner Signature	Date Considered
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